Bht'd

which maintains the ability to enhance lysine production when recombinantly expressed in C. glutamicum.

The isolated polynucleotide of claim 21, wherein said amino acid sequence is at least 80% identical to that of SEQ ID NO:2.

The isolated polynucleotide of claim 21, wherein said amino acid sequence is at least 90% identical to that of SEQ ID NO:2.

The isolated polynucleotide of claim 21, wherein said amino acid sequence is at least 95% identical to that of SEQ ID NO:2.

25. An isolated polynucleotide consisting essentially of the nucleotide sequence of SEQ ID NO:1.

A vector comprising a sequence identical to that of the isolated polynucleotide of any one of claims 19-25.

27. A bacterium transformed with the vector of claim 26.

An isolated polynucleotide according to claim 19, wherein said polynucleotide codes for component H of the phosphotransferase system.

An isolated polynucleotide, comprising at least 15 consecutive nucleotides selected from SEQ ID NO:2, wherein said polynucleotide functions as a primer in a polymerase chain reaction to prepare or amplify a polynucleotide encoding a polypeptide having the enzymatic activity of component H of the phosphotransferase system.

36. An isolated polynucleotide comprising at least 15 consecutive nucleotides selected from SEQ ID NO:2 or the complement thereof, having the function of a probe in

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hybridization reaction to isolate, detect or determine a polynucleotide encoding a polypeptide having the enzymatic activity of component H of the phosphotransferase system.

30 31.

An isolated polynucleotide hybridizing to the complement of SEQ ID NO:1 stringency, wherein said polynucleotide is isolated from the species Corynebacterium glutamicum and wherein said polynucleotide encodes a protein having the enzymatic activity of component H of the phosphotransferase system. --